# STATE OF NEW HAMPSHIRE Department of Environmental Services Air Resources Division



# **Title V Operating Permit**

Permit No: TV-OP-022 MINOR AMENDMENT

Date Issued: **May 23, 2000** 

This certifies that:

Dartmouth College
6111 McKenzie Hall
Hanover, NH 03755-3552

has been granted a Title V Operating Permit for the following facility and location:

Dartmouth College Hanover, NH

AFS Point Source Number - 3300900020

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V Operating Permit Application filed with the New Hampshire Department of Environmental Services on **June 27**, **1996**, along with a FESOP application filed on **February 20**, **1996**, and Amendments to the Title V Permit Application filed on: **September 18**, **1997**; **December 10**, **1997**; **January 29**, **1998** under the signature of the following responsible official certifying to the best of their knowledge that the statements and information therein are true, accurate and complete.

Responsible Official:

Michael K. Getter

**Director** 

(603) 646-1110

Technical Contact:

**Bo Petersson** 

**Mechanical Engineer, Facilities Operation and Management** 

(603) 646-1790

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of Code of the Federal Regulations 40 Part 70.

This Title V Operating Permit shall expire on **February 28, 2005**.

#### SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

For the New Hampshire I	Department of Er	vironmental S	Services, Ai	r Resource	Division

Director, Air F	Resources	Division
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# **Facility Specific Title V Operating Permit Conditions**

# I. Facility Description of Operations:

Dartmouth College is an educational institution located in Hanover, New Hampshire. The college campus is composed of educational facilities, including several academic buildings and residential units owned and operated by the college. In addition, the college owns and operates a cogeneration facility at it's Hanover campus.

Emission sources associated with the power plant include four utility boilers, an emergency diesel generator, two No. 6 fuel oil storage tanks, and a gasoline pump station utilized by service vehicles on the Hanover campus. Emission sources at the college's educational facilities include four large furnace/boiler units for building heating and hot water, several small and large capacity emergency generators for emergency lighting and running special heating, ventilation, and air conditioning (HVAC) units in libraries for historic record and book preservation, several small space heating units, several chillers, several small capacity fuel storage tanks, and several HVAC systems for each of the buildings.

### II. Permitted Activities:

In accordance with all of the applicable requirements identified in this permit, the permittee is authorized to operate the devices and or processes identified in Sections III, IV, and V within the terms and conditions specified in this Permit.

# **III.** Significant Activities Identification:

**A.** The activities identified in the following table (Table 1) are subject to and regulated by this Title V Operating Permit:

	Table 1 - Significant Acti	vity Identification	
Emission Unit Number (EU#)	Description of Emission Unit	Exhaust Stack Identification	Emissions Unit Maximum Allowable Permitted Capacity
EU1	Boiler #1 Zurn, Serial Number 100978 Installed 1986 Low NOx Burners Installed 1995	Stack #1 (Common stack shared among Boilers #1, #2, #3 and #4)	Limited to 117.0 million Btu per hour gross heat input, which is equivalent to 780 gallons per hour of No. 6 fuel oil containing no more than 1.5 percent sulfur and 0.6 percent fuel bound nitrogen by weight. Maximum steam production rate for Boiler #1 will be limited to 90,000 pounds per hour of superheated steam at 450 psig and 700 degrees F. The maximum production rate for Boilers #1, #2, #3, & #4 shall be limited to 180,000 pounds per hour of steam at 450 psig and 700 degrees F for any 1-hour period. The maximum production rate for the boilers shall also be limited to 143,000 pounds per hour of steam at 450 psig and 700 degrees F for any 6-hour period (a rolling 6-hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours) [From Temporary Permit TP-B-351]. Facility wide cap of 175.0 tons of actual nitrogen oxide emissions for all four boilers at the steam plant, four building furnace/boiler units, plus all emergency generators during any consecutive 365 day period for the purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996 [From Temporary Permit TP-B-387].

	Table 1 - Significant Activity Identification			
EU2 <sup>1</sup>	Boiler #2 Babcock & Wilcox Serial Number FJ2709 Installed 1958	Stack #1 (Common stack shared among Boilers #1, #2, #3 and #4)	Limited to 45.0 million Btu per hour gross heat input, from No. 6 fuel oil with a maximum sulfur content of 1.5 percent by weight. The Boiler #2 maximum steam production rate shall be limited to 37,500 pounds per hour of saturated steam at 160 psig and a feedwater temperature of 258 degrees F. The maximum production rate for Boilers #1, #2, #3, & #4 shall be limited to 180,000 pounds per hour of steam at 450 psig and 700 degrees F for any 1-hour period. The maximum production rate for the boilers shall also be limited to 143,000 pounds per hour of steam at 450 psig and 700 degrees F for any 6-hour period (a rolling 6-hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours) [From Temporary Permit TP-B-351]. Facility wide cap of 175.0 tons of actual nitrogen oxide emissions for all four boilers at the steam plant, four building furnace/boiler units, plus all emergency generators during any consecutive 365 day period for the purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996 [From Temporary Permit TP-B-387].	

<sup>&</sup>lt;sup>1</sup> In a letter dated June 20, 1996, Dartmouth College has requested that the maximum firing rate be revised from 60 to 45 mmBtu/hr and maximum steam production rate be changed from 49,500 to 37,500 lb/hr to reflect removing the third burner nozzle from Boiler #2.

	Table 1 - Significant Acti	vity Identification	
EU3	Boiler #3 Nebraska Boiler Co. Model No. NS-E-65SH Installed 1996 Low NOx Burner Installed 1996 Flue Gas Recirculation	Stack #1 (Common stack shared among Boilers #1, #2, #3 and #4)	Limited to 95.5 million Btu per hour gross heat input, which is equivalent to 636.7 gallons per hour of No. 6 fuel oil containing no more than 0.5 percent sulfur by weight. Maximum steam production rate for Boiler #3 will be limited to 75,000 pounds per hour of superheated steam at 450 psig and 700 degrees F. The maximum production rate for Boilers #1, #2, #3, & #4 shall be limited to 180,000 pounds per hour of steam at 450 psig and 700 degrees F for any 1-hour period, which is equivalent to 1557 gallons of No. 6 fuel oil. The maximum production rate for the boilers shall also be limited to 143,000 pounds per hour of steam at 450 psig and 700 degrees F for any 6-hour period (a rolling 6-hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours) [From Temporary Permit TP-B-387]. Facility wide cap of 175.0 tons of actual nitrogen oxide emissions for all four boilers at the steam plant, four building furnace/boiler units, plus all emergency generators during any consecutive 365 day period for the purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996 [From Temporary Permit TP-B-387].

	Table 1 - Significant Acti	ivity Identification	
EU4	Boiler #4 Combustion Engineering Model VP-12W Installed 1967 Low NOx Burner Installed 1995	Stack #1 (Common stack shared among Boilers #1, #2, #3 and #4)	Limited to 97.3 million Btu per hour gross heat input, which is equivalent to 648.7 gallons per hour of No. 6 fuel oil with a maximum sulfur content of 1.5 percent and maximum fuel bound nitrogen content of 0.6 percent by weight. #4 Boiler is limited to 70,000 pounds per hour of superheated steam at 450 psig and 700 degrees F. The maximum production rate for Boilers #1, #2, #3, & #4 shall be limited to 180,000 pounds per hour of steam at 450 psig and 700 degrees F for any 1-hour period, which is equivalent to 1557 gallons of No. 6 fuel oil. The maximum production rate for the boilers shall also be limited to 143,000 pounds per hour of steam at 450 psig and 700 degrees F for any 6-hour period (a rolling 6-hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours) [From Temporary Permit TP-B-352]. Facility wide cap of 175.0 tons of actual nitrogen oxide emissions for all four boilers at the steam plant, four building furnace/boiler units, plus all emergency generators during any consecutive 365 day period for the purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996 [From Temporary Permit TP-B-387].

	Table 1 - Significant Activity Identification				
EU5 <sup>2</sup>	All Dartmouth College Emergency Generators (See Appendix B for a listing of all Emergency Generators located at the Dartmouth College facility.)  Note: The Power Plant Emergency Generator, (Caterpillar Model 3508, 800 kW), may not be used as a load shaving unit. If it is ever used as a load shaving unit, it will be subject to NOx RACT requirements contained in Env-A 1211.13 and the facility may become subject to other applicable requirements.	Stacks Vary	500 hours of operation during any consecutive 12 month period for any individual unit, the combined theoretical potential emissions of NOx from all such generators are limited to less than 25 tons for any consecutive 12 month period, and a facility wide cap of 175.0 tons of actual nitrogen oxides emissions for all four boilers at the steam plant, plus all emergency generators during any consecutive 365 day period for purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996.		
EU6	Tank #1 - 125,000 gallon No.6 Fuel Oil (AST), Installed in 1991	Not Applicable (NA)	NA		
EU7	EU7 Tank #2 - 125,000 gallon No.6 Fuel Oil (AST), Installed in 1991		NA		
EU8 Gasoline Service Station 10,000 gallons gasoline Installed in 1991		NA	NA		
EU9	Water Chillers A. Psychology Building Backup Water Chiller (Trane) B. Water Chiller Plant (York Electric Chiller) C. Webster Hall Backup Water Chiller (McQuay) D. Gilman Building Backup Water Chiller (Carrier)	NA NA NA NA	NA NA NA NA		

# **Stack Criteria:**

**B.** The following stacks for the above listed significant devices at this facility shall discharge vertically without obstruction (including rain caps) and meet the following criteria in accordance with the state-only modeling requirements specified in Env-A 1300 and Env-A 1400:

Table 2 - Stack Criteria		
Stack #	Minimum Stack Height (Feet)	Maximum Stack Exit Diameter (Feet)
Stack #1 (Common flue for Boilers #1, #2, #3, & #4 at the steam plant [EU1, EU2, EU3, & EU4])	175	10.0
Stack #2 (Power Plant Emergency Generator)	20	0.83

<sup>&</sup>lt;sup>2</sup> Dartmouth College is in process of replacing several of its battery-powered emergency lighting systems located in various buildings on campus with small capacity emergency generators. Prior to installation of any new emergency generator, Dartmouth College shall submit a cover letter requesting such changes, vendor information for any new emergency generator and completed ARD-1 & ARD-2 forms for the new emergency generator. A written response from the DES will be required prior to purchase and installation.

Preauthorized changes to the state-only requirements pertaining to stack parameters (set forth in this permit), shall be permitted only when an air quality impact analysis which meets the criteria of Env-A 606 is performed either by the facility or the DES (if requested by facility in writing) in accordance with the "DES Policy and Procedure for Air Quality Impact Modeling". All air modeling data shall be kept on file at the facility for review by the DES upon request.

# **IV.** Insignificant Activities Identification:

All activities at this facility that meet the criteria identified in the New Hampshire Rules Governing the Control of Air Pollution Part Env-A 609.03(g), shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

See Attachment 1 in Appendix A for a listing of insignificant activities at Dartmouth College, comprised of many small-sized residential furnace/boilers used for building heating and making hot water.

# V. <u>Exempt Activities Identification:</u>

All activities identified in the New Hampshire Rules Governing the Control of Air Pollution Env-A 609.03(c) shall be considered exempt activities and shall not be subject to or regulated by this Title V Operating Permit.

### **VI.** Pollution Control Equipment Identification:

EU1, EU3, and EU4 identified in Table 1 operate with low nitrogen oxide burners (LNB), which are classified as pollution control equipment. Each of the three LNB's were technically evaluated by DES and determined to meet LNB requirements as part of nitrogen oxide reasonably available control technology (NOx RACT) requirements.

#### **VII.** Alternative Operating Scenarios:

No alternative operating scenarios were identified for this Permit.

# VIII. Applicable Requirements:

# A. State-only Enforceable Operational and Emission Limitations:

The Permittee shall be subject to the state-only operational and emission limitations identified in Table 3 below.

	Table 3 - State-only Enforceable Operational and Emission Limitations			
Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement	
1.	Env-A 404.01	Facility Wide	Sulfur Dioxide emissions from each Class B major source, shall have an average emission rate of 1.6 pounds of sulfur dioxide per million Btu input. Dartmouth College shall be required to use No. 6 oil with a maximum of 1.5 percent sulfur by weight, with the exception of #3 Boiler, which is limited to using No. 6 oil with a maximum sulfur content of 0.5 percent by weight, as required by its initial Temporary Permit No. TP-B-387.	
2.	Env-A 1305.01(a)	Facility Wide	New or modified devices, new or modified area sources, and existing devices or area sources for which new applications for permits are filed that have the potential to emit, in any amount, substances that meet the criteria of Env-A 1301 shall be subject to Env-A 1300, until such time as the Env-A 1400 requirements supersede the Env-A 1300 requirements. (As outlined below)	
3.	Env-A 1305.02	Facility Wide	Air quality impact analysis of devices and area sources emitting substances meeting the criteria of Env-A 1301 shall be performed in accordance with the "DES Policy and Procedure for Air Quality Impact Modeling" or other comparable dispersion modeling methods approved by EPA.	
4.	Env-A 1403.01	Facility Wide	In accordance with Env-A 1403.01, new or modified devices or processes installed after May 8, 1998, shall be subject to the requirements of Env-A 1400.	
5.	Env-A 1403.02(a)	Facility Wide	In accordance with 1403.02(a), all existing unmodified devices or processes which are in operation during the transition period ending three years from May 8, 1998 (May 8, 2001), shall comply with either Env-A 1300 or Env-A 1400.	
6.	Env-A 1403.02(b)	Facility Wide	In accordance with Env-A 1403.02(b), all existing devices or processes in operation after the transition period ending three years from May 8, 1998 (May 8, 2001), shall comply with Env-A 1400. Env-A 1300 will no longer be in effect.	
7.	Env-A 1404.01(d)	Facility Wide	In accordance with Env-A 1404.01(d), documentation for the demonstration of compliance shall be retained at the site, and shall be made available to the DES for inspection.	
8.	Env-A 1405.02	Facility Wide	In accordance with Env-A 1405.02 the owner of an existing device or process requiring a permit modification under chapter Env-A 1400 shall submit to the DES no later than one year prior to the end of the transition period (May 8, 2000), an application for a modification to a title V permit in accordance with Env-A 609.18, and a request to the DES to perform air dispersion modeling.	
9.	Env-A 1405.03	Facility Wide	In accordance with Env-A 1405.03 the owner of an existing device or process requiring a permit under Env-A 1300 shall submit to the DES no later than one year prior to the end of the transition period (May 8, 2000), a compliance plan identifying how the device or process will comply with chapter Env-A 1400 by the end of the transition period. The compliance plan shall contain the dates when the information required in Env-A 1405.02 will be filed with the DES.	

	Table 3 - State-only Enforceable Operational and Emission Limitations			
10.	Env-A 1406.01	Facility Wide	In accordance with Env-A 1406.01 the owner of any device or process which emits a regulated toxic air pollutant shall determine compliance with the ambient air limits by using one of the methods provided in Env-A 1406.02, Env-A 1406.03, or Env-A 1406.04. Upon request, the owner of any device or process which emits a regulated toxic air pollutant shall provide documentation of compliance with the ambient air limits to the DES.	
11.	Env-A 2003.04(d)	Boilers #1, #2, #3, & #4 [EU1, EU2, EU3, & EU4]	Exceedances of the opacity standard shall not be considered violations of this part if the source demonstrates to the division that such exceedances were the result of the adherence to good boiler operating practices which, in the long term, results in the most efficient or safe operation of the boiler.	
12.	Env-A 2003.04(e)	Boilers #1, #2, #3, & #4 [EU1, EU2, EU3, & EU4]	Examples of activities that may cause exceedances of the opacity standard that shall not be considered violations include the following:  (1) Continuous soot blowing of the entire boiler tube sections over regular time intervals as determined by the operator and in conformance with good boiler operating practice; and  (2) Cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit.	
13.	Env-A 2003.04(f)	Boilers #1, #2, #3, & #4 [EU1, EU2, EU3, & EU4]	Exceedances of the opacity standard shall not be considered violations of this part if the source demonstrates to the division that such exceedances were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such an incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.	

# VIII. B. <u>Federally Enforceable Operational and Emission Limitations</u>

The Permittee shall be subject to the federally enforceable operational and emission limitations identified in Table 4 below.

	Table 4 - Federally Enforceable Operational and Emission Limitations					
Item #	Regulatory Cite	Applicable Emission Unit	Applicable Requirement			
1.	RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	EU1, EU2, EU3, & EU4 (Boilers #1, #2, #3, & #4)	The maximum combined steam production rate for Boilers #1, #2, #3, & #4 shall be limited to 180,000 pounds per hour of steam at 450 psig and 700 degrees F for any 1 hour period.  In addition, the maximum combined steam production rate for Boilers #1, #2, #3, & #4 shall be limited to 143,000 pounds per hour of steam at 450 psig and 700 degrees F for any 6 hour period. A rolling 6 hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours.  These production limitations are imposed in order to protect the 3 hour and 24 hour NAAQS's for sulfur dioxide emissions.			
2.	Temporary Permit TP-B-351 & RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	Boiler #1 [EU1]	The maximum operating rate for Boiler #1 shall be limited to 117.0 mmBtu/hr gross heat input, which is equivalent to 780 gallons per hour of No. 6 fuel oil containing no more than 1.5 percent sulfur and 0.6 percent nitrogen by weight percent.  The maximum steam production rate for Boiler #1 shall be limited to 90,000 pounds per hour of superheated steam at 450 psig and 700 degrees F.			
3.	RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	Boiler #2 [EU2]	The maximum operating rate of Boiler #2 shall be limited to 45 mmBtu/hr gross heat input of No. 6 fuel oil containing no more than 1.5 percent sulfur by weight.  The maximum steam production rate for Boiler #2 shall be limited to 37,500 pounds per hour of steam at 160 psig and a feedwater temperature of 258 degrees F.  Boiler #2 shall be allowed to burn less than 1000 gallons per calendar year of No. 2 fuel oil with no more than 0.4 percent sulfur by weight for emergency situations (i.e. power outages) for the purpose of reheating No. 6 fuel oil in the two 125,000 gallon storage tanks in order to bring the steam plant up to normal operation after a power outage. (Refer to August 9, 1999 correspondence on file with DES describing this matter.)			
4.	Temporary Permit TP-B-387 & RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	Boiler #3 [EU3]	The maximum operating rate for Boiler #3 shall be limited to 95.5 mmBtu/hr gross heat input, which is equivalent to 636.7 gallons per hour of No. 6 fuel oil containing nor more than 0.5 percent sulfur by weight.  The maximum steam production rate for Boiler #3 shall be limited to 75,000 pounds per hour of superheated steam at 450 psig and 700 degrees F.			
5.	Temporary Permit TP-B-352 & RSA 125-C:6, RSA 125-C:11, and Env-A 606.04	Boiler #4 [EU4]	The maximum operating rate for Boiler #4 shall be limited to 97.3 mmBtu/hr gross heat input, which is equivalent to 648.7 gallons per hour of No. 6 fuel oil containing no more than 1.5 percent sulfur and 0.6 percent nitrogen by weight.  The maximum steam production rate for Boiler #4 shall be limited to 70,000 pounds per hour of superheated steam at 450 psig and 700 degrees F.			

	Table 4 - Federally Enforceable Operational and Emission Limitations				
6.	Env-A 622.03(f)(2)	Boilers #1, #2, #3, & #4 (EU1- EU4), and EU5 (All emergency generators)	Dartmouth College Steam Plant (Boilers #1, #2, #3, & #4 plus the emergency generator) and all emergency generators located at the Dartmouth College facility shall be limited to 175.0 tons of actual NOx emissions during any consecutive 365 day period for purposes of NSR/PSD avoidance, which was the result of the construction of the new Boiler #3 conducted in 1996.		
7.	Env-A 806	Boilers #1, #2, #3, & #4 (EU1-EU4)	The owner or operator shall operate and maintain continuous flow rate monitoring/recording systems to measure steam flow rates in pounds per hour for each of the Boilers and for the total steam plant. The systems shall meet all applicable ASME specifications.		

	Т	able 4 - Federally	<b>Enforceable Operational and Emission Limitations</b>
8.	Env-A 1205.05	EU8 Gasoline Dispensing Facility	Stage I System Physical Requirements for Gasoline Dispensing Facilities. The owner of an applicable storage tank at a gasoline dispensing facility shall comply with all of the following requirements:  (a) The owner shall install a CARB-certified stage I system.  (b) Stage I systems shall recover at least 95% of all gasoline vapors at the facility or be at least as efficient as the manufacturer's design efficiency, whichever is higher.  (c) Each vent pipe on an underground or aboveground gasoline storage tank at such a gasoline dispensing facility shall be equipped with pressure/vacuum (P/V) relief valves.  (d) Settings for P/V relief valves for underground tanks shall be the following:  (1) Where specific pressure and vacuum relief settings for P/V relief valves are required by CARB for a particular CARB-certified stage II system, such settings shall be used; and  (2) Where there are no specific relief settings for P/V relief valves required by CARB, the settings shall be the following:  (1) Where specific pressure and ½ oz/in² or 3.81 inche water column vacuum.  (e) Settings for P/V relief valves for aboveground tanks shall be the following:  (1) Where specific pressure and vacuum relief settings for P/V relief valves are required by CARB for a particular CARB-certified stage II system, such settings shall be used; and  (2) Where there are no specific pressure and vacuum relief settings for P/V relief valves are required by CARB, the following shall apply:  a. The vacuum relief setting shall be equal to, or less than 1.7 oz/in² or 3 inches water column; and  b. The pressure relief setting shall be equal to, or less than 1.7 oz/in² or 3 inches water column; and  b. The pressure relief setting shall be either:  1. A pressure of 10% of the maximum allowable working pressure of the tank; or  2. Whichever is less, 8 oz/in² or 13.84 inches water column.  (f) Stage I systems shall be quipped with a submerged fill pipe shall discharge within 6 inches from the bottom of the tank.  (g) Gasoline storage tanks with a capa

	Table 4 - Federally Enforceable Operational and Emission Limitations			
9.	Env-A 1205.06	EU8 Gasoline Dispensing Facility	<ul> <li>Stage I System Maintenance Requirements for Gasoline Dispensing Facilities.         The owner or operator of an applicable storage tank at a gasoline dispensing facility shall comply with all of the following requirements:         </li> <li>(a) Stage I equipment shall be maintained and properly operating as specified by the manufacturer and CARB.</li> <li>(b) Stage I equipment, except P/V relief valves, shall be maintained to be vapor tight. Connections between vent pipes and the P/V relief valves shall be vapor tight.</li> <li>(c) The division shall inspect stage I systems in order to determine compliance with these regulations.</li> </ul>	
10.	Env-A 1205.07	EU8 Gasoline Dispensing Facility	<ul> <li>Stage I System Operational Requirements for Gasoline Dispensing Facilities. The owner and operator of an applicable storage tank at a gasoline dispensing facility shall comply with the following requirements:</li> <li>(a) No person shall transfer or allow the transfer of gasoline into a gasoline storage tank at a gasoline dispensing facility unless a CARB-certified stage I system is utilized.</li> <li>(b) No person shall deliberately or negligently vent any captured vapors to the atmosphere.</li> <li>(c) No person shall deliberately or negligently mishandle gasoline such that it would result in evaporation into the atmosphere, including spilling, discarding into a sewer, or storing in an open container.</li> <li>(d) Where a person is gauging or inspecting a storage tank, it shall not be performed under the following conditions: <ul> <li>(1) When loading or unloading operations are in progress; or</li> <li>(2) When such tank is left open for more than 5 minutes.</li> </ul> </li> </ul>	

	Т	able 4 - Federally	Enforceable Operational and Emission Limitations
11.	Env-A 1205.08	EU8 Gasoline Dispensing Facility	Notification of Changes in a Stage I System.  (a) Within 60 days prior to any construction, installation, or significant modification involving a stage I system, the owner shall notify the division.  (b) Within 60 days after a change of ownership, the new owner shall notify the division.  (c) Within 60 days after a change in usage from gasoline to another product or another product to gasoline, the owner shall notify the division.  (d) Such notification shall be submitted to the division on a Station Notification Form provided by the division.  (e) The owner shall provide the following on the Station Notification Form:  (1) The owner's name, address, and signature;  (2) The name and location of the gasoline dispensing facility;  (3) The amount of throughput of such facility;  (4) The type of equipment to be constructed, installed or modified, if applicable;  (5) The date when construction, installation or significant modification is scheduled to begin, if applicable; and  (6) The anticipated date of completion of construction, installation, or significant modification, if applicable.  (f) The division shall inform such owner within 60 days of receipt if the notification does not sufficiently include the information as stated in (e), above.  (g) Where the division is not able to determine the effectiveness or design of the equipment or system being constructed, installed or significantly modified, the division shall request additional information in order to make such determination.
12.	Env-A 1211.02(j)	EU5 All Emergency Generators <sup>3</sup>	Each emergency generator shall be limited to less than 500 hours of operation per year during any consecutive 12 month period. The combined theoretical potential emissions from all emergency generators are limited to less than 25 tons for any consecutive 12 month period.
13.	Env-A 1211.11(f)	EU5 All Emergency Generators	The emissions from emergency generators shall be included in the calculation of both the actual and theoretical potential emissions from a stationary source.
14.	Temporary Permit TP-B-351	Boiler #1	The NOx emission rate of Boiler #1 shall be limited to the following:  A. 0.31 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a fuel bound nitrogen (FBN) content of 0.39 percent by weight or less (monitored during stack testing); OR  B. 0.39 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a FBN content of 0.60 percent by weight or less monitored during stack testing.
15.	Env-A 1211.05 (d)(3)(a.)(2.)	Boiler #1	Install, operate, and maintain low NOx burners (LNB) in Boiler #1. The DES has conducted a technical evaluation of the current burners used in Boiler #1 and approved it as meeting the requirements for a LNB.

 $<sup>^3</sup>$ Please refer to Attachment 2 in Appendix B for a listing of all emergency generators located at the Dartmouth College facility.

	Т	able 4 - Federally	Enforceable Operational and Emission Limitations		
16.	Temporary Permit TP-B-387	Boiler #3	The NOx emission rate of Boiler #3 shall be limited to the following:  A. 0.29 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a fuel bound nitrogen (FBN) content of 0.39 percent by weight or less (monitored during stack testing); OR  B. 0.39 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a FBN content of 0.60 percent by weight or less monitored during stack testing.		
17.	Env-A 1211.05 (c)(2)(b.)(2.)	Boiler #3	Install, operate, and maintain low NOx burner (LNB) in Boiler #3. The DES has conducted a technical evaluation of the current burner used in Boiler #3 and approved it as meeting the requirements for a LNB.		
18.	Temporary Permit TP-B-387	Boiler #4	The NOx emission rate of Boiler #4 shall be limited to the following:  A. 0.31 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a fuel bound nitrogen (FBN) content of 0.39 percent by weight or less (monitored during stack testing); OR  B. 0.39 lb/mmBtu for any 24 hour calendar day average when burning fuel oil with a FBN content of 0.60 percent by weight or less monitored during stack testing.		
19.	Env-A 1211.05 (d)(3)(a.)(2.)	Boiler #4	Install, operate, and maintain low NOx burner (LNB) in Boiler #4. The DES has conducted a technical evaluation of the current burner used in Boiler #4 and approved it as meeting the requirements for a LNB.		
20.	40 CFR 52 <sup>4</sup>	Facility Wide	The sulfur content of No. 2 oil shall not exceed 0.40 percent sulfur by weight.		
21.	40 CFR 52 <sup>5</sup>	Facility Wide	Gaseous fuel shall contain no more than 5 grains per 100 cubic feet of sulfur, calculated as hydrogen sulfide at standard conditions.		
22.	Env-A 2003.01	Boiler #2	No owner or operator shall cause or allow average opacity from fuel burning devices installed on or prior to May 13, 1970 in excess of 40 percent for any continuous 6 minute period in any 60 minute period.		
23.	Env-A 2003.02	Boilers #1, #3, & #4, and All Emergency Generators	No owner or operator shall cause or allow average opacity from fuel burning devices installed after May 13, 1970 in excess of 20 percent for any continuous 6 minute period in any 60 minute period.		

Env-A 402.02(a), effective on December 27, 1990, was adopted as part of the State Implementation Plan (SIP) on September 14, 1992 and is still considered federally enforceable until such time as the SIP is amended and approved by the EPA.

Env-A 402.03, effective on December 27, 1990, was adopted as part of the State Implementation Plan (SIP) on September 14, 1992 and is still considered federally enforceable until such time as the SIP is amended and approved by the EPA.

	Table 4 - Federally Enforceable Operational and Emission Limitations				
24.	Env-A 2003.04(a)	Boiler #3	Activities Exempt from Visible Emission Standards.		
			For those steam generating units subject to 40 CFR 60, no more than one of the following 2 exemptions shall be taken:		
			(1) During periods of startup, shutdown and malfunction, average opacity shall be allowed to be in excess of 20 percent for one period of 6 continuous minutes in any 60 minute period; or		
			(2) During periods of normal operation, soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20 percent but not more than 27 percent for one period of 6 continuous minutes in any 60 minute period.		
25.	Env-A 2003.04(c)	Boilers #1, #2, & #4	Activities Exempt from Visible Emission Standards		
		CC π4	The average opacity shall be allowed to be in excess of those standards specified in Env-A 2003.01 and Env-A 2003.02 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.		
26.	Env-A 2003.08(c)(2)	Boiler #1	Dartmouth College shall not cause or allow emissions of particulate matter from Boiler #1 to exceed 0.15 lb/mmBtu.		
27.	Env-A 2003.06(2)	Boiler #2	Dartmouth College shall not cause or allow emissions of particulate matter from Boiler #2 to exceed 0.47 lb/mmBtu.		
28.	Env-A 2003.08(c)(1)	Boiler #3	Dartmouth College shall not cause or allow emissions of particulate matter from Boiler #3 to exceed 0.30 lb/mmBtu.		
29.	Env-A 2003.06(2)	Boiler #4	Dartmouth College shall not cause or allow emissions of particulate matter from Boiler #4 to exceed 0.41 lb/mmBtu.		
30.	40 CFR 60 Subpart Db	Boiler #1	The nitrogen oxides emissions limitations for this Boiler apply at all times including periods of startup, shutdown, or malfunction.		
	§ 60.44b(h),(i)		Compliance with emission limits for nitrogen oxides are to be determined on a 30 day rolling average basis.		
31.	40 CFR 60 Subpart Dc § 60.42c(d) Standard for sulfur dioxide	Boiler #3	On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO2 in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.		
32.	40 CFR 60 Subpart Dc § 60.43c(c) Standard for particulate matter (Opacity)	Boiler #3	On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.		

	Table 4 - Federally Enforceable Operational and Emission Limitations					
33.	40 CFR 60 Subpart Kb § 60.116b	EU6 & EU7 (No. 6 Fuel Oil Storage Tanks #1 & #2)	<ul> <li>(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.</li> <li>(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 20,000 gallons is subject to no provision of this Subpart other than those required by this paragraph.</li> </ul>			
34.	1990 CAAA Section 112(r)(1) (40 CFR 68)	Facility Wide	The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:  1. Identify potential hazards which may result from such releases using appropriate hazard assessment techniques; 2. Design and maintain a safe facility; 3. Take steps necessary to prevent releases; and 4. Minimize the consequences of accidental releases which do occur.			
35.	Stratospheric Ozone Protection 40 CFR 82 § 82.154(a) Prohibitions	EU9	Effective June 14, 1993, no person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the environment any class I or class II substance used as refrigerant in such equipment. De minimis releases associated with good faith attempts to recycle or recover refrigerants are not subject to this prohibition. Releases shall be considered de minimis if they occur when:  (1) The required practices set forth in §82.156 are observed and recovery or recycling machines that meet the requirements set forth in §82.158 are used; or  (2) The requirements set forth in 40 CFR part 82, Subpart B are observed.  The knowing release of refrigerant subsequent to its recovery from an appliance shall be considered a violation of this prohibition.			
36.	§ 82.154(b) Prohibitions	EU9	Effective July 13, 1993, no person may open appliances except MVACs for maintenance, service, or repair, and no person may dispose of appliances except for small appliances, MVACs, and MVAC-like appliances:  (1) Without observing the required practices set forth in §82.156; and (2) Without using equipment that is certified for that type of appliance pursuant to §82.158.			
37.	§ 82.154(e) Prohibitions	EU9	Effective August 12, 1993, no person may open appliances except MVACs for maintenance, service, or repair, and no person may dispose of appliances except for small appliances, MVACs, and MVAC-like appliances, unless such person has certified to the Administrator pursuant to §82.162 that such person has acquired certified recovery or recycling equipment and is complying with the applicable requirements of this Subpart.			
38.	§ 82.154(f) Prohibitions	EU9	Effective August 12, 1993, no person may recover refrigerant from small appliances, MVACs, and MVAC-like appliances for purposes of disposal of these appliances unless such person has certified to the Administrator pursuant to §82.162 that such person has acquired recovery equipment that meets the standards set forth in §82.158 (l) and/or (m), as applicable, and that such person is complying with the applicable requirements of this Subpart.			
39.	§ 82.154(i) Prohibitions	EU9	Effective August 12, 1993, no person reclaiming refrigerant may release more than 1.5% of the refrigerant received by them.			

	Table 4 - Federally Enforceable Operational and Emission Limitations				
40.	§ 82.156(a) Required Practices	EU9	Effective July 13, 1993, all persons disposing of appliances, except for small appliances, MVACs, and MVAC-like appliances must evacuate the refrigerant in the entire unit to a recovery or recycling machine certified pursuant to §82.158. All persons opening appliances except for MVACs for maintenance, service, or repair must evacuate the refrigerant in either the entire unit or the part to be serviced (if the latter can be isolated) to a system receiver or a recovery or recycling machine certified pursuant to §82.158. Effective January 9, 1995, certified technicians must verify that the applicable level of evacuation has been reached in the appliance or the part before it is opened.  (1) Persons opening appliances except for small appliances, MVACs, and MVAC-like appliances for maintenance, service, or repair must evacuate to the levels in table 1 before opening the appliance, unless  (i) Evacuation of the appliance to the atmosphere is not to be performed after completion of the maintenance, service, or repair, and the maintenance, service, or repair is not major as defined at §82.152(k); or  (ii) Due to leaks in the appliance, evacuation to the levels in table 1 is not attainable, or would substantially contaminate the refrigerant being recovered; or (iii) The recycling or recovery equipment was certified pursuant to §82.158(b)(2). In any of these cases, the requirements of §82.156(a)(2) must be followed.		
41.	§ 82.162(a) Certification by owners of recovery and recycling equipment	EU9	No later than August 12, 1993, or within 20 days of commencing business for those persons not in business at the time of promulgation, persons maintaining, servicing, or repairing appliances except for MVACs, and persons disposing of appliances except for small appliances and MVACs, must certify to the Administrator that such person has acquired certified recovery or recycling equipment and is complying with the applicable requirements of this Subpart. Such equipment may include system-dependent equipment but must include self-contained equipment, if the equipment is to be used in the maintenance, service, or repair of appliances except for small appliances. The owner or lessee of the recovery or recycling equipment may perform this certification for his or her employees. Certification shall take the form of a statement signed by the owner of the equipment or another responsible officer and setting forth:  (1) The name and address of the purchaser of the equipment, including the county name;  (2) The name and address of the establishment where each piece of equipment is or will be located;  (3) The number of service trucks (or other vehicles) used to transport technicians and equipment between the establishment and job sites and the field;  (4) The manufacturer name, the date of manufacture, and if applicable, the model and serial number of the equipment; and  (5) The certification must also include a statement that the equipment will be properly used in servicing or disposing of appliances and that the information given is true and correct. Owners or lessees of recycling or recovery equipment having their places of business in:  Connecticut  Maine  Massachusetts  New Hampshire  Rhode Island  Vermont  must send their certifications to:  CAA §608 Enforcement Contact, EPA Region I, Mail Code APC, JFK Federal Building, One Congress Street, Boston, MA 02203.		

	Т	able 4 - Federally	Enforceable Operational and Emission Limitations	
42.	§ 82.162(b) Certification by owners of recovery and recycling equipment	EU9	Certificates under paragraph (a) of this section are not transferable. In the event of a change of ownership of an entity that maintains, services, or repairs appliances except MVACs, or that disposes of appliances except small appliances, MVACs, and MVAC-like appliances, the new owner of the entity shall certify within 30 days of the change of ownership pursuant to paragraph (a) of this section.	
43.	§ 82.166(b) Reporting and record keeping requirements	EU9	Purchasers of any class I or class II refrigerants who employ certified technicians may provide evidence that at least one technician is properly certified to the wholesaler who sells them refrigerant; the wholesaler will then keep this information on file and may sell refrigerant to the purchaser or his authorized representative even if such purchaser or authorized representative is not a properly certified technician. In such cases, the purchaser must notify the wholesaler in the event that the purchaser no longer employs at least one properly certified technician. The wholesaler is then prohibited from selling class I or class II refrigerants to the purchaser until such time as the purchaser employs at least one properly certified technician. At that time, the purchaser must provide new evidence that at least one technician is properly certified.	
44.	§ 82.166(k) Reporting and record keeping requirements	EU9	Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added. The owner/operator must keep records of refrigerant purchased and added to such appliances in cases where owners add their own refrigerant. Such records should indicate the date(s) when refrigerant is added.	
45.	§ 82.166(m) Reporting and record keeping requirements	EU9	All records required to be maintained pursuant to this section must be kept for a minimum of three years unless otherwise indicated. Entities that dispose of appliances must keep these records on-site.	
46.	§ 82.166(n) Reporting and record keeping requirements	EU9	The owners or operators of appliances must maintain on-site and report to EPA at the address listed in §82.160 the following information, where such reporting and record keeping is required and within the timelines specified under §82.156 (i)(1), (i)(2), (i)(3) and (i)(5). This information must be relevant to the affected appliance and must include: identification of the facility; the leak rate; the method used to determine the leak rate and full charge; the date a leak rate of greater than the allowable annual leak rate was discovered; the location of leaks(s) to the extent determined to date; and any repair work that has been completed thus far and the date that work was completed.	

	Table 4 - Federally Enforceable Operational and Emission Limitations				
47.	§ 82.166(o) Reporting and record keeping requirements	EU9	The owners or operators of appliances must maintain on-site and report to EPA at the address specified in §82.160 the following information where such reporting and record keeping is required and in the timelines specified in §82.156 (i)(7) and (i)(8), in accordance with §82.156 (i)(7) and (i)(8). This information must be relevant to the affected appliance and must include:  (1) The identification of the industrial process facility;  (2) The leak rate;  (3) The method used to determine the leak rate and full charge;  (4) The date a leak rate of 35 percent or greater was discovered;  (5) The location of leaks(s) to the extent determined to date;  (6) Any repair work that has been completed thus far and the date that work was completed;  (7) A plan to complete the retrofit or replacement of the system;  (8) The reasons why more than one year is necessary to retrofit to replace the system;  (9) The date of notification to EPA; and  (10) An estimate of when retrofit or replacement work will be completed.		
48.	1990 CAAA Section 608(c)(2) Prohibitions	EU9	Effective 5 years after the enactment of the Clean Air Act Amendments of 1990, paragraph (1) shall also apply to the venting, release, or disposal of any substitute substance for a class I or class II substance by any person maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration which contains and uses as a refrigerant any such substance, unless the Administrator determines theat venting, releasing, or disposing of such substance does not pose a threat to the environment. For purposes of this paragraph, the term "appliance" includes any device which contains and uses as a refrigerant a substitute substance and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer.		
49.	40 CFR 82 Subpart G Significant New Alternatives Policy Program (SNAP) § 82.174(b) Prohibitions	EU9	No person may use a substitute which a person knows or has reason to know was manufactured, processed or imported in violation of the regulations in this Subpart, or knows or has reason to know was manufactured, processed or imported in violation of any use restriction in the acceptability determination, after the effective date of any rulemaking imposing such restrictions.		
50.	§ 82.174(c) Prohibitions	EU9	No person may use a substitute without adhering to any use restrictions set by the acceptability decision, after the effective date of any rulemaking imposing such restrictions.		
51.	§ 82.174(d) Prohibitions	EU9	No person may use a substitute after the effective date of any rulemaking adding such substitute to the list of unacceptable substitutes.		

# VIII. C. Emission Reductions Trading Requirements

The Permittee did not request emissions reductions trading in its operating permit application. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reductions trading, must be authorized under the applicable requirements of either Env-A 3000 (the "Emissions Reductions Credits (or ERCs) Trading Program") or Env-A 3100 (the "Discrete Emissions Reductions (or DERs) Trading Program") and 42 U.S.C. §7401 et seq. (The "Act"), and must be provided for in this Permit.

# VIII. D. <u>Monitoring/Testing Requirements</u>

The Permittee is subject to the monitoring/ testing requirements as contained in Table 5 below:

			Table 5 - Monitoring/Testing Requirements		
Item #	Control Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	Facility Stacks and boilers	Allows for adequate dispersion of HAPs and other regulated pollutants	Conduct an annual inspection of each stack and fuel burning device. Inspections shall include documenting any leaks, holes, rusting and/or disrepair of stacks, and the manufacturer's recommended periodic physical, mechanical, and electrical system checks for the fuel burning equipment. Records of inspections and subsequent maintenance conducted as a result of the annual inspections shall be kept on file at the Facility for review by the DES and/or EPA upon request.	Annually	40 CFR 70.6(a)(3) Federally Enforceable
2.	Boiler #1	Opacity	The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.	Continuous	40 CFR 60 Subpart Db § 60.48b(a) Federally Enforceable
3.	Boiler #1	Nitrogen Oxides	The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system.  The continuous monitoring system shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.	Continuous	40 CFR 60 Subpart Db § 60.48b(b),(c) Federally Enforceable
4.	Boiler #1	Nitrogen Oxides	The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor shall be expressed in lb/million Btu heat input and shall be used to calculate the average emission rates under \$60.44b. The 1-hour averages shall be calculated using the data points required under \$60.13(b). At least 2 data points must be used to calculate each 1-hour average.	Continuous	40 CFR 60 Subpart Db § 60.48b(d) Federally Enforceable
5.	Boiler #1	Nitrogen Oxides	When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.	Continuous	40 CFR 60 Subpart Db § 60.48b(f) Federally Enforceable

			Table 5 - Monitoring/Testing Requirements		
6.	Boiler #1	Continuous Monitors	The procedures under 40 CFR 60, Subpart A, § 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.  In addition, the facility will follow and conduct quality assurance requirements as specified in 40 CFR 60, Appendix F.		40 CFR 60 Subpart Db § 60.48b(e) Federally Enforceable
7.	Boiler #2	Periodic Monitoring (NOx RACT Compliance)	Annually, before April 1st of each year: Perform an efficiency test using the test procedures specified in ASME/ANSI Boiler Test Code 4.1 and adjust the combustion process of the boiler in accordance with the procedures specified in Chapter 5, Combustion Efficiency Tables, Taplin, Harry R., Fairmont Press, 1991.	Annually, before April 1st	Env-A 1211.05(b) Federally Enforceable
8.	Boiler #3	Opacity	(a) The owner or operator of an affected facility combusting coal, residual oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a CEMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.  (b) All CEMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1, 40 CFR 60, Appendix B. The span value of the opacity CEMS shall be between 60 and 80 percent.	Continuous	40 CFR 60 Subpart Dc § 60.47c Federally Enforceable

			Table 5 - Monitoring/Testing Requirements		
9.	Boilers #3 & #4	NOx RACT Compliance Testing	No less frequently than once every three years, Dartmouth College shall conduct stack testing of Boilers #3 & #4 to demonstrate compliance with NOx emissions limitations contained in this permit.  The following test methods shall be used for Boiler #1: (1) Method 7, 7A, 7C, 7D or 7E, 40 CFR Part 60, Appendix A to determine NOx concentrations in stack gases from applicable stationary sources.  (2) Method 1 or 2, 40 CFR Part 60, Appendix A to determine the exit velocity of stack gases from applicable stationary sources.  (3) Method 3 or 3A, 40 CFR Part 60, Appendix A to determine carbon dioxide, oxygen, excess air and	Every 3 years	Env-A 1211.21(b),(d) Federally Enforceable
			molecular weight (dry basis) of stack gases from applicable stationary sources.  (4) Method 4, 40 CFR Part 60, Appendix A to determine moisture content (volume fraction of water vapor) of stack gases from applicable stationary sources.  The following test methods shall be used for Boilers #3 & #4:  (1) Method 3A, 40 CFR Part 60, Appendix A for determination of oxygen and carbon dioxide of stack gases from applicable stationary sources.  (2) Method 7E, 40 CFR Part 60, Appendix A for determination of nitrogen oxides concentrations in stack gases from applicable stationary sources.  (3) The diluent and NOx readings are done on a consistent wet or dry basis so moisture does not need to be performed. Using a Method 19 equation, the lb NOx/mmBtu is determined. A calibrated fuel flow meter is used to determine the mmBtu/hr heat input.		

			Table 5 - Monitoring/Testing Requirements		
10.	Boilers #1, #2, #3, & #4	Steam Flow Rate	The owner or operator shall operate and maintain continuous flow rate monitoring/recording systems to measure steam flow rates in pounds per hour for each of the Boilers and for the total steam plant. The systems shall meet all applicable ASME specifications.  Average hourly steam production rates in pounds per hour for each of the Boilers and the total steam plant shall be logged into the data collection system.  In addition, a rolling 6 hour average shall be calculated each hour as the average of the hourly steam flow rates for the previous 6 hours for the total steam plant and shall be logged into the data collection system.	Continuous	Env-A 806 Federally Enforceable
11.	Boilers #1, #2, #3, & #4	Periodic Monitoring	Fuel flow meters/recorders will be operated and maintained for each of the four Boilers to monitor No. 6 fuel oil usage in each of the boilers.	Daily	Env-A 806 & 40 CFR 70.6 (a)(3)(i)(B) Federally Enforceable
12.	Facility Wide	Fuel Sulfur Content Verification	The operator shall conduct testing using the appropriate ASTM method or retain certified delivery tickets from the fuel oil supplier which state the weight percent of sulfur for each delivery of fuel oil to determine compliance with the sulfur content limitation provisions in this permit for liquid fuels in order to meet the reporting requirements specified in Env-A 900.	For each delivery	Env-A 809 Federally Enforceable

# VIII. E. Record keeping Requirements

The Permittee is subject to the Record keeping requirements as contained in Table 6 below:

	Table 6 - Applicable Record keeping	Requirements		
Item #	Record keeping Requirement	Frequency of Record keeping	Applicable Emission Unit	Regulatory Cite Federally Enforceable or State-Only Enforceable
1.	The Permittee shall retain records of all required monitoring data, record keeping and reporting requirements, and support information for a period of at least 5 years from the date of the origination.	Retain for a minimum of 5 years	Facility wide	40 CFR 70.6(a)(3)(ii)(B) Federally Enforceable
2.	The permittee shall maintain records of monitoring and testing as specified in Table 5 of this permit.	Maintain on a continuous basis as specified in Table 5 of this permit	Facility wide	40 CFR 70.6(a)(3)(iii) (A) Federally Enforceable
3.	The owner or operator shall retain supplier certified delivery tickets which state the weight percent sulfur by the supplier for: each delivery of No. 6 fuel oil to determine compliance with the 0.5 percent sulfur content limitation for Boiler #3 and 1.5 percent sulfur content limitation for Boilers #1, #2, & #4; and each delivery of No. 2 fuel oil to determine compliance with the 0.4 percent sulfur content limitation for Boiler #2 (emergency situations) and all other combustion sources using No. 2 fuel oil facility wide.  The owner or operator shall also compute and keep records of the 30 day average sulfur content of No. 6 fuel oil for Boiler #3. In addition, reasons for any noncompliance with the sulfur content limitation in No. 6 fuel oil shall be recorded.	Maintain on a continuous basis and retain for a minimum of 5 years	Boiler #3	Env-A 809 & 40 CFR 60 Subpart Dc § 60.48c(e),(f) Federally Enforceable
4.	The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.	Maintain on a continuous basis and retain for a minimum of 5 years	Boiler #3	40 CFR 60 Subpart Dc § 60.48c(g) Federally Enforceable

Table 6 - Applicable Record keeping Requirements						
5. The owner or operator of an affected facility subject to the nitrogen oxides standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:  (1) Calendar date.  (2) The average hourly nitrogen oxides emission rates (expressed as NO2) (ng/J or lb/million Btu heat input) measured or predicted.  (3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.  (4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.  (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.  (6) Identification of the times when emission data have been excluded from the calculation of average emission 112 rates and the reasons for excluding data.  (7) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.  (9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.  (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.	Maintain on a continuous basis and retain for a minimum of 5 years	Boiler #1	40 CFR 60 Subpart Db § 60.49b(g) Federally Enforceable			
6. The permittee shall maintain records of average hourly steam production rates for each of the Boilers and the total steam plant and rolling 6 hour averages of steam production rates for the total steam plant.	Maintain on a continuous basis for a period of 5 years	Boilers #1, #2, #3, & #4	40 CFR 70.06(a)(3) Federally Enforceable			

	Table 6 - Applicable Record keeping	g Requirements		
7.	The permittee shall maintain the following records in a permanently bound notebook for the annual Boiler tune-ups for Boiler #2, containing the following information:  1. The date(s) on which:  a. The efficiency test was conducted; and  b. The combustion process was last adjusted;  2. The name(s), title and affiliation of the person(s) who:  a. Conducted the efficiency test; and  b. Made the adjustments;  3. The NOX emission concentration, in ppmvd, corrected to 15% oxygen, after the adjustments are made;  4. The CO emission concentration, in ppmvd, corrected to 15% oxygen, after the adjustments are made; and  5. The opacity readings; and  6. Any other information required by Env-A 901.06 and Env-A 901.07.	Maintain on a continuous basis	Boiler #2	Env-A 1211.05(b)(2) & 40 CFR 70.6(a)(3)(iii) (A) Federally Enforceable
8.	Maintain records of tank capacity; volume and type of VOC stored; daily throughput during a normal day and a high ozone season day, if different from normal operating conditions; and monthly and annual throughput for each of the No. 6 fuel oil storage tanks.	Maintain on a continuous basis	EU6 & EU7 (No. 6 Fuel Oil Storage Tanks #1 & #2)	Env-A 901.04 & Env-A 901.06 Federally Enforceable
9.	Monthly records of fuel utilization & hours of operation for each of the four Boilers shall be kept at the facility and contain the following information:  (A) Consumption; (B) Fuel type; (C) Viscosity; (D) Sulfur content as percent sulfur by weight of fuel; and (E) Btu content per gallon or cubic feet of fuel.	Monthly & calendar year totals of fuel consumption and hours of operation	Boilers #1, #2, #3, & #4	Env-A 901.03 Federally Enforceable
10.	Monthly and calendar year totals of No. 2 fuel oil consumption by Boiler #2 for emergency situations.	Monthly & calendar year totals	Boiler #2	Env-A 901.03 Federally Enforceable
11.	Monthly records of fuel utilization & hours of operation for each emergency generator shall be kept at the facility and contain the following information:  (A) Consumption; (B) Fuel type; (C) Viscosity; (D) Sulfur content as percent sulfur by weight of fuel; and (E) Btu content per gallon or cubic feet of fuel.	Monthly & calendar year totals of fuel consumption and hours of operation	All Emergency Generators	Env-A 901.03 Federally Enforceable

	Table 6 - Applicable Record keeping Requirements						
12.	Monthly records of fuel utilization for each furnace/boiler located at the Dartmouth College facility shall be kept at the facility and contain the following information:  (A) Consumption; (B) Fuel type; (C) Viscosity; (D) Sulfur content as percent sulfur by weight of fuel; and (E) Btu content per gallon or cubic feet of fuel.	Monthly & calendar year totals of fuel consumption	All Furnace/ Boiler Units	Env-A 901.03 Federally Enforceable			
13.	NOX Record keeping Requirements: For fuel burning devices, including boilers and internal combustion engines, the following information shall be recorded and maintained:  (A) Facility information, including:  1. Source name; 2. Source identification; 3. Physical address; 4. Mailing address; 4. Mailing address; and (B) Identification of fuel burning device; (C) Operating schedule information for each fuel burning device identified in (B), above, including; 1. Days per calendar week during the normal operating schedule; 2. Hours per day during the normal operating schedule and for a typical ozone season day, if different from the normal operating schedule; and 3. Hours per year during the normal operating schedule; (D) Type, and amount of fuel burned, for each fuel burning device, during normal operating conditions and for a typical ozone season day, if different from normal operating conditions, on an hourly basis in million Btu's per hour; (E) The following NOX emission data, including records of total annual emissions, in tons per year, and typical ozone season day emissions, in pounds per day: 1. Theoretical potential emissions for the calculation year for each fuel burning device; and 2. Actual NOX emissions for each fuel burning device.	Daily, weekly, monthly, and annually	Facility Wide	Env-A 901.08 Federally Enforceable			

			Table 6 - Applicable Record keeping	g Requirements		
14.				Maintain records for a period of 5 years	Gasoline Dispensing Facility	Env-A 1205.10 Federally Enforceable
	(a) The means to provide access to any and all components as necessary to determine compliance with the					
	(b)	site and provide to the division upon request the following:  (a) The means to provide access to any and all components as necessary to determine compliance with the provisions of this part.				

# VIII. F. Reporting Requirements

The Permittee is subject to the reporting requirements as contained in Table 7 below:

	Table 7 - Applicable Reportin	ng Requirements		
Item #	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite Federally Enforceable or State-Only Enforceable
1.	VOC Reporting Requirements: All sources subject to the reporting requirements of Env-A 901.07(b) shall submit the following information to the director in accordance with the schedule in Env-A 901.07(h):  (A) Facility information, including:  1. Source name; 2. Source identification; 3. Physical address; 4. Mailing address; and 5. A copy of the certificate of accuracy required to be maintained pursuant to Env-A 901.04(c).  (B) Identification of each device or process operating at the source identified in (A), above; (C) Operating schedule information for each device or process identified in (B), above, including such information for:  1. A typical business day; and 2. A typical business day; and 2. A typical business day; (D) Total quantities of actual VOC and NOX emissions for the entire facility and for each device or process identified in (B), above, including: a. Annual VOC emissions, and b. Typical high ozone season day VOC emissions.	By April 15, 1996 for calendar year 1995; every third calendar year after 1995 by April 15th of the following year.	Facility Wide	Env-A 901.07(b) Federally Enforceable
2.	NOX Reporting Requirements: For fuel burning devices, including boilers and engines, and miscellaneous sources, the owner or operator shall submit to the director, annually (no later than April 15th of the following year), reports of the data required by Condition VIII.E., Table 6, Item 7., including total annual quantities of all NOx emissions.	Annually (no later than April 15th of the following year)	Facility Wide	Env-A 901.09 Federally Enforceable

	Table 7 - Applicable Reportin	ng Requirements		
3.	Quarterly Excess Emissions Reporting (Boiler #1): The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. (1) Any affected facility subject to the opacity standards under \$60.43b(e) or to the operating parameter monitoring requirements under \$60.13(i)(1). (2) Any affected facility that is subject to the nitrogen oxides standard of \$60.44b, and that (i) Combusts natural gas, distillate oil, or residual oil with a nitrogen content of 0.3 weight percent or less, or (ii) Has a heat input capacity of 73 MW (250 million Btu/hour) or less and is required to monitor nitrogen oxides emissions on a continuous basis under \$60.48b(g)(1) or steam generating unit operating conditions under \$60.48b(g)(2). (3) For the purpose of \$60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under \$60.43b(f). (4) For purposes of \$60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate, as determined under \$60.46b(e), which exceeds the applicable emission limits in \$60.44b.	Postmarked by the 30th day after the subsequent reporting period	Boiler #1	40 CFR 60 Subpart Db §60.49b(h) Federally Enforceable
4.	Quarterly NOx Emissions Report (Boiler #1): The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under \$60.48(b) shall submit a quarterly report containing the information recorded under paragraph (g) of this section. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.	Postmarked by the 30th day after the subsequent reporting period	Boiler #1	40 CFR 60 Subpart Db §60.49b(i) Federally Enforceable
5.	Quarterly Opacity Excess Emissions Reporting (Boiler #3): The owner or operator of each coal-fired, residual oil-fired, or wood-fired affected facility subject to the opacity limits under \$60.43c(c) shall submit excess emission reports for any calendar quarter for which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test, unless no excess emissions occur during that quarter. The initial semiannual report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test, or following the date of the previous quarterly report, as applicable. Each subsequent quarterly or semiannual report shall be postmarked by the 30th day following the end of the reporting period.	Postmarked by the 30th day after the subsequent reporting period	Boiler #3	40 CFR 60 Subpart Dc § 60.48c(c) Federally Enforceable

		Table 7 - Applicable Reportin	ng Requirements		
6.	The owner or openission limits, requirements un Administrator ceach of the three for noncompliar	Oil Sulfur Content for Boiler #3: perator of each affected facility subject to the SO2 fuel oil sulfur limits, or percent reduction ader \$60.42c shall submit quarterly reports to the containing the 30 day average fuel sulfur content for e calendar months in the period and any reasons are with the 0.5 percent sulfur limitation and a corrective actions taken.	Postmarked by the 30th day after the subsequent calendar quarter	Boiler #3	40 CFR 60 Subpart Dc § 60.48c(d),(e) Federally Enforceable
7.	Dartmouth Coll	ck Testing Results: ege shall submit a stack testing report to the 30 days of the date of the stack test.	Within 30 days of stack testing	Boilers #3 & #4	Env-A 1211.21(c)
8.	monthly and cal combustion dev limited to: boile miscellaneous c content shall be and calendar yea	hall submit an annual fuel usage report indicating lendar year total fuel consumption for all ices located at the facility, including, but not rs; emergency generators; furnaces; and ombustion devices. Type of fuel and fuel sulfur included in the above report. In addition, monthly ar totals of No. 2 fuel oil consumption by Boiler by situations shall be reported.	Annually (no later than April 15th of the following year)	Facility Wide	40 CFR 70.6 (a)(1) Federally Enforceable
9.		g of deviations from Permit requirements within an occurance by phone or fax in accordance with a of this Permit.	Prompt reporting (ie; within 24 hours of an occurrence).	Facility Wide	Env-A 902.02 & 40 CFR 70.6(a)(3)(iii) (B) Federally Enforceable
10.	monitoring and instances of dev identified in suc by a responsible	hall submit to DES a summary report of testing requirements every 6 months. All iations from Permit requirements must clearly be the reports. All required reports must be certified to official consistent with section 70.5(d). The tain a summary of the following information:  A summary report of steam production rate for each of the Boilers and the total steam plant which demonstrates compliance with permit limitations on individual Boiler hourly steam production limits, hourly average steam production limits for the total steam plant, and the rolling 6 hour average steam production limit for the total steam plant;  Preventative maintenance and inspection results for stacks and fuel burning devices.  A summary of the results of the Boiler Tune-up for Boiler #2.  A summary report of sulfur content for all fuel oil received at the facility, broken out as No. 2 fuel oil, No. 6 fuel oil for Boiler #3, and No. 6 fuel oil for Boilers #1, #2, & #4.	Every 6 months by July 31st and January 31st of each calendar year.	Facility wide	40 CFR 70.6(a)(3)(iii) (A) Federally Enforceable

	Table 7 - Applicable Reporting Requirements						
11.	Any report submitted to the DES and/or EPA shall include the compliance certification statement as outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	As specified	Facility wide	40 CFR 70.6(c)(1) Federally Enforceable			
12.	Annual reporting and payment of emission based fees shall be conducted in accordance with Section XXIII of this Permit	As specified in Section XXIII.	Facility wide	Env-A 704.03 Federally Enforceable			
13.	Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	April 15th	Facility wide	40 CFR 70.6(c)(1) Federally Enforceable			

### **IX.** Requirements Currently Not Applicable:

The Permittee did not identify any requirements which are not applicable to the facility.

#### **General Title V Operating Permit Conditions**

# X. <u>Issuance of a Title V Operating Permit:</u>

A. This Permit is issued in accordance with the provisions of Part Env-A 609. In accordance with 40 CFR 70.6(a)(2) this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Permittee's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

**B.** Pursuant to Env-A 609.02(b), this Permit shall be a state permit to operate as defined in RSA 125-C:11, III.

#### **XI.** Title V Operating Permit Renewal Procedures:

Pursuant to Env-A 609.06(b), an application for renewal of this Permit shall be considered timely if it is submitted to the Director at least six months prior to the designated expiration date of this Permit.

#### **XII.** Application Shield:

Pursuant to Env-A 609.07, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

### XIII. Permit Shield:

- **A.** Pursuant to Env-A 609.08(a), a permit shield shall provide that:
  - 1. For any applicable requirement or any state requirement found in the New Hampshire Rules

- Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
- 2. For any potentially applicable requirement or any potential state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically identified in Section IX of this Permit as not applicable to the stationary source or area source, the Permittee need not comply with the specifically identified federal or state requirements.
- **B.** The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.08(b). It shall not apply to certain conditions as specified in Env-A 609.08(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the NH Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Permittee shall comply with the provisions of said requirement to the extent that it applies to the Permittee.
- **D.** If the DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant or Permittee, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- **E.** Pursuant to Env-A 609.08(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.18 or to exercise its summary abatement authority.
- **F.** Pursuant to Env-A 609.08(g), nothing contained in Section XIII of this Permit or in any title V operating permit issued by the DES shall alter or affect the following:
  - 1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  - 2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  - 3. The provisions of section 303 of the Act regarding emergency orders including the authority of the EPA Administrator under that section;
  - **4.** The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - 5. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;

- 6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the Act; or
- 7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

# **XIV.** Reopening for Cause:

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.18(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.18(b) through (g).

# **XV.** Administrative Permit Amendments:

- **A.** Pursuant to Env-A 612.01, the Permittee may implement the changes addressed in the request for an administrative permit amendment as defined in Part Env-A 100 immediately upon submittal of the request.
- **B.** Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

# XVI. Operational Flexibility:

- A. Pursuant to Env-A 612.02(a), the Permittee subject to and operating under this Title V Operating Permit may make changes involving trading of emissions under this existing Title V Operating Permit at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all the conditions are met as specified in Section XVI. A. 1. through 7. of this permit and a notice is submitted to the DES and EPA describing the intended changes. At this point, the DES has not included any permit terms authorizing emissions trading in this permit.
  - 1. The change is not a modification under any provision of title I of the Act;
  - 2. The change does not cause emissions to exceed the emissions allowable under the title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  - 3. The owner or operator has obtained any temporary permit required by Env-A 600;
  - 4. The owner or operator has provided written notification to the director and administrator at least 15 days prior to the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur;
    - b. A description of each such change;

- c. Any change in emissions that will result and how this change in emissions will comply with the terms and conditions of the permit;
- d. A written request that the operational flexibility procedures be used; and
- e. The signature of the responsible official, consistent with Env-A 605.04(b);
- 5. The title V operating permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
- 6. The owner or operator has included in the application for the title V operating permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the title V operating permit which qualify under a federally- enforceable emissions cap that is established in the title V operating permit independent of the otherwise applicable requirements; and
- 7. The proposed change complies with Env-A 612.02 (e).
- **B.** Pursuant to Env-A 612.02(c), the Permittee subject to and operating under this Title V Operating Permit may make changes not addressed or prohibited by this existing Title V Operating Permit at the permitted stationary source or area source without filing a Title V Operating Permit application, provided that all the conditions specified in Env-A 612.02(c)(1) through (6) are met and a notice is submitted to the DES and EPA describing the intended changes.
- C. Pursuant to Env-A 612.02(d), the Permittee, Operator, Director and Administrator shall attach each notice of an off-permit change completed in accordance with Section XVI of this Title V Operating Permit to their copy of the current Title V Operating Permit.
- **D.** Pursuant to Env-A 612.02(e), any change under Section XVI shall not exceed any emissions limitations established under the NH Rules Governing the Control of Air Pollution, or result in an increase in emissions, or result in new emissions, of any toxic air pollutant or hazardous air pollutant other than those listed in the existing Permit.
- **E.** Pursuant to Env-A 612.02(f), the off-permit change shall not qualify for the permit shield under Env-A 609.08.

#### **XVII.** Minor Permit Amendments:

- **A.** Pursuant to Env-A 612.04 prior to implementing a minor permit modification, the Permittee shall submit a written request to the Director in accordance with the requirements of Env-A 612.04(b).
- **B.** The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.04(c) through (g).

- C. Pursuant to Env-A 612.04(h), the permit shield specified in Env-A 609.08 shall not apply to minor permit amendments under Section XVII. of this Permit.
- **D.** Pursuant to Env-A 612.04(i), the Permittee shall be subject to the provisions of Part Env-A 614 and Part Env-A 615 if the change is made prior to the filing with the Director a request for a minor permit amendment.

# **XVIII. Significant Permit Amendments:**

- **A.** Pursuant to Env-A 612.05, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.05(a)(1) through (7).
- **B.** Prior to implementing the significant permit amendment, the Permittee shall submit a written request to the Director and to the EPA which includes all the information as referenced in Env-A 612.05(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Permittee shall be subject to the provisions of Env-A 614 and Env-A 615 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the procedures specified in Env-A 612.05(d), (e) and (f).

# XIX. Title V Operating Permit Suspension, Revocation or Nullification:

- **A.** Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
  - 1. the Permittee has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  - 2. that the emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- **B.** The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

# **XX.** <u>Inspection and Entry:</u>

Pursuant to Env-A 614.01, EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the NH Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

# XXI. <u>Certifications:</u>

# **A.** Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

- 1. The terms and conditions of the Permit that are the basis of the certification;
- 2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether the method was continuous or intermittent during the reporting period;
- 3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- **4.** Any additional information required by the DES to determine the compliance status of the source.

# **B.** Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification of accuracy statement by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII. of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services Air Resources Division 6 Hazen Drive P.O. Box 95 Concord, NH 03302-0095 ATTN: Compliance Bureau All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship
Director Air Compliance Program
United States Environmental Protection Agency
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Air Compliance Clerk

#### **XXII.** Enforcement:

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii) a Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### **XXIII.** Emission-Based Fee Requirements:

- **A.** The Permittee shall pay an emission-based fee annually for this facility as calculated each calendar year pursuant to Env-A 704.03.
- **B.** The Permittee shall determine the total actual annual emissions from the facility to be included in the emission-based multiplier specified in Env-A 704.03(a) for each calendar year in accordance with the methods specified in Env-A 620.
- C. The Permittee shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 704.03 and the following equation:

Where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 704.

E = The emission-based multiplier is based on the calculation of total annual emissions as specified in Env-A 704.02 and the provisions specified in Env-A 704.03(a).

DPT = The dollar per ton fee the DES has specified in Env-A 704.03(b).

CPIm= The Consumer Price Index Multiplier as calculated in Env-A 704.03(c).

- ISF = The Inventory Stabilization Factor as specified in Env-A 704.03(d).
- **D.** The Permittee shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.
- **E.** The Permittee shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.
- F. The Permittee shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XXIII.B. and C of this Permit for each calendar year by October 15<sup>th</sup> of the following calendar year in accordance with Env-A 704.04. The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services Air Resources Division 6 Hazen Drive P.O. Box 95 Concord, NH 03302-0095 ATTN: Emissions Inventory

**G.** The DES shall notify the Permittee of any under payments or over payments of the annual emission-based fee in accordance with Env-A 704.05.

# **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the DES copies of records that the Permittee is required to retain by this Permit. The Permittee may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Part Env-A 103 at the time such information is submitted to the DES. The DES shall evaluate such requests in accordance with the provisions of Part Env-A 103.

#### **XXV.** Property Rights

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

#### XXVI. Severability Clause

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

# **XXVII. Emergency Conditions**

Pursuant to 40 CFR 70.6 (g), the Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>6</sup> emission limitations specified in this Permit as a result of an emergency<sup>7</sup>. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- **A.** An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- **B.** The permitted facility was at the time being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- **D.** The Permittee submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

# **XXVIII.** Permit Deviation

In accordance with 40 CFR 70.6(a)(3)(iii)(B), the Permittee shall report to the DES all instances of deviations from Permit requirements, by telephone or fax, within 24 hours of discovery of such deviation pursuant to Env-A 902.02. This report shall include the deviation itself, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Said Permit deviation shall also be submitted in writing to the DES within fifteen (15) days of documentation of the deviation by facility personnel. Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII of this Permit.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

h:\laughton\permits\dartcolg\tvminmod.wpd Minor Modification for opacity exceedances - March 2000

<sup>&</sup>lt;sup>6</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>&</sup>lt;sup>7</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

# **APPENDIX A**

# ATTACHMENT 1 - List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers

List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers			
Location/Description	# of Units	Fuel Type	Heat Input per Unit (mmBtu/hr)
Lodge	1	No. 2 Fuel Oil	0.84
Lodge	1	No. 2 Fuel Oil	0.32
29 South Park	1	No. 2 Fuel Oil	0.21
29 South Park	1	No. 2 Fuel Oil	0.08
27 South Park	1	No. 2 Fuel Oil	0.21
27 South Park	1	No. 2 Fuel Oil	0.08
25 South Park	1	No. 2 Fuel Oil	0.21
25 South Park	1	No. 2 Fuel Oil	0.08
23 South Park	1	No. 2 Fuel Oil	0.23
23 South Park	1	No. 2 Fuel Oil	0.08
19 South Park	1	No. 2 Fuel Oil	0.23
19 South Park	1	No. 2 Fuel Oil	0.08
9 South Park	1	No. 2 Fuel Oil	0.32
9 South Park	1	No. 2 Fuel Oil	0.08
7 South Park	1	No. 2 Fuel Oil	0.18
7 South Park	1	No. 2 Fuel Oil	0.08
5 South Park	1	No. 2 Fuel Oil	0.04
5 South Park	1	No. 2 Fuel Oil	0.08
67 East Wheelock	1	No. 2 Fuel Oil	0.18
67 East Wheelock	1	No. 2 Fuel Oil	0.18
28 East Wheelock - East	1	No. 2 Fuel Oil	0.21
28 East Wheelock - East	1	No. 2 Fuel Oil	0.08
28 East Wheelock - West	1	No. 2 Fuel Oil	0.15
28 East Wheelock - West	1	No. 2 Fuel Oil	0.08
26 East Wheelock	1	No. 2 Fuel Oil	0.21
26 East Wheelock	1	No. 2 Fuel Oil	0.08
24 East Wheelock	1	No. 2 Fuel Oil	0.37
24 East Wheelock	1	No. 2 Fuel Oil	0.08
23 East Wheelock	1	No. 2 Fuel Oil	0.42

List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers			
23 East Wheelock	1	No. 2 Fuel Oil	0.12
1 North Park	1	No. 2 Fuel Oil	0.37
1 North Park	1	No. 2 Fuel Oil	0.12
13 East Wheelock	1	No. 2 Fuel Oil	0.32
13 East Wheelock	1	No. 2 Fuel Oil	0.12
11 East Wheelock	1	No. 2 Fuel Oil	0.46
11 East Wheelock	1	No. 2 Fuel Oil	0.08
Gould House	1	No. 2 Fuel Oil	0.12
South Balch	6	No. 2 Fuel Oil	0.08
South Balch	6	No. 2 Fuel Oil	0.08
Valley Road	8	No. 2 Fuel Oil	0.12
Valley Road	6	No. 2 Fuel Oil	0.14
Valley Road	14	No. 2 Fuel Oil	0.08
Austin Avenue	4	No. 2 Fuel Oil	0.12
Austin Avenue	1	No. 2 Fuel Oil	0.08
Hudson House	1	No. 2 Fuel Oil	0.14
Remsen	1	No. 2 Fuel Oil	1.68
Vail	1	No. 2 Fuel Oil	1.68
River Crest	61	No. 2 Fuel Oil	0.08
Fletcher	29	No. 2 Fuel Oil	0.12
Chandler	13	No. 2 Fuel Oil	0.12
Dresdon	2	No. 2 Fuel Oil	0.14
Bridgeman	5	No. 2 Fuel Oil	0.14
Burton	4	No. 2 Fuel Oil	0.12
Masacoma Street	1	No. 2 Fuel Oil	0.18
Masacoma Street	1	No. 2 Fuel Oil	0.08
Fullington Farm Garage	1	No. 2 Fuel Oil	0.18
Brown House	1	No. 2 Fuel Oil	0.14
10 West Wheelock	1	No. 2 Fuel Oil	0.49
10 West Wheelock	1	No. 2 Fuel Oil	0.08
19 West Wheelock	1	No. 2 Fuel Oil	0.23
25 West Wheelock	1	No. 2 Fuel Oil	0.42

List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers			
27 West Wheelock	1	No. 2 Fuel Oil	0.42
25 ½ West Wheelock	1	No. 2 Fuel Oil	0.32
20 West Street	1	No. 2 Fuel Oil	0.37
20 West Street	1	No. 2 Fuel Oil	0.11
18 Allen Street	1	No. 2 Fuel Oil	0.21
18 Allen Street	1	No. 2 Fuel Oil	0.11
2 Prospect Street	1	No. 2 Fuel Oil	0.21
2 Prospect Street	1	No. 2 Fuel Oil	0.11
9 Webster	1	No. 2 Fuel Oil	0.23
9 Webster	1	No. 2 Fuel Oil	0.08
13 Webster	1	No. 2 Fuel Oil	0.32
13 Webster	1	No. 2 Fuel Oil	0.11
15 Webster	1	No. 2 Fuel Oil	0.32
5 Webster Terrace	1	No. 2 Fuel Oil	0.21
1 & 3 Occum Ridge	1	No. 2 Fuel Oil	0.11
1 & 3 Occum Ridge	1	No. 2 Fuel Oil	0.08
DOC House	1	No. 2 Fuel Oil	0.56
DOC House	1	No. 2 Fuel Oil	0.32
29 Rope Ferry	1	No. 2 Fuel Oil	0.23
29 Rope Ferry	1	No. 2 Fuel Oil	0.08
12 Rope Ferry	1	No. 2 Fuel Oil	0.23
12 Rope Ferry	1	No. 2 Fuel Oil	0.11
35 North Main Street	1	No. 2 Fuel Oil	0.49
36 North Main Street	1	No. 2 Fuel Oil	0.23
36 North Main Street	1	No. 2 Fuel Oil	0.08
Fuller Boat House	1	No. 2 Fuel Oil	0.08
Crew Facilities	1	No. 2 Fuel Oil	0.18
Crew Facilities	1	No. 2 Fuel Oil	0.25
42 College	1	No. 2 Fuel Oil	0.21
42 College	1	No. 2 Fuel Oil	0.11
8 Clement	1	No. 2 Fuel Oil	0.23
4 Dana	1	No. 2 Fuel Oil	0.21

List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers			
4 Dana	1	No. 2 Fuel Oil	0.08
Hillcrest	1	No. 2 Fuel Oil	0.56
Hillcrest	1	No. 2 Fuel Oil	0.56
Parker House	1	No. 2 Fuel Oil	0.37
Webster Cottage	1	No. 2 Fuel Oil	0.08
44 East Wheelock	1	No. 2 Fuel Oil	0.14
44 East Wheelock	1	No. 2 Fuel Oil	0.08
56 East Wheelock	1	No. 2 Fuel Oil	0.14
5 Woodmare	1	No. 2 Fuel Oil	0.14
Morton Farm	1	No. 2 Fuel Oil	0.18
44 College	1	No. 2 Fuel Oil	0.23
44 College	1	No. 2 Fuel Oil	0.11
18 North Park	1	No. 2 Fuel Oil	0.23
18 North Park	1	No. 2 Fuel Oil	0.11
16 North Park	1	No. 2 Fuel Oil	0.18
16 North Park	1	No. 2 Fuel Oil	0.08
12 Curtis Road	1	No. 2 Fuel Oil	0.14
19 Lyme Road	1	No. 2 Fuel Oil	0.18
19 Lyme Road	1	No. 2 Fuel Oil	0.11
13 Summer Street	1	No. 2 Fuel Oil	0.08
13 Summer Street	1	No. 2 Fuel Oil	0.11
Fullington Farm House	1	No. 2 Fuel Oil	0.21
Green House Farm	1	No. 2 Fuel Oil	0.14
Green House Farm	1	No. 2 Fuel Oil	0.08
Rennie Farm	1	No. 2 Fuel Oil	0.15
Rennie Farm	1	No. 2 Fuel Oil	0.08
Hanover Country Club	1	No. 2 Fuel Oil	0.14
Hanover Country Club	1	No. 2 Fuel Oil	0.08
Occum Inn Annex	1	No. 2 Fuel Oil	0.21
44 North College Street	1	No. 2 Fuel Oil	0.35
44 North College Street	1	No. 2 Fuel Oil	0.11
200 Sachem	1	No. 2 Fuel Oil	1.68

List of Insignificant Activities at Dartmouth College - Furnaces/Small Boilers			
200 Sachem	1	No. 2 Fuel Oil	0.23
13 Choate Road	1	No. 2 Fuel Oil	0.42
13 Choate Road	1	No. 2 Fuel Oil	0.11
Shattuck Observatory	1	Propane	0.16
Pike House	1	No. 2 Fuel Oil	0.39
West Wheelock Bldg.	1	No. 2 Fuel Oil	0.56
21 East Wheelock Street	1, 1	No. 2 Fuel Oil	0.175, 0.105
4 South Balch Street	1, 1	No. 2 Fuel Oil	0.175, 0.105
1 Occum Ridge	1, 1	No. 2 Fuel Oil	0.175, 0.105
3 Occum Ridge	1, 1	No. 2 Fuel Oil	0.175, 0.105

List of Insignificant Activities at Dartmouth College - Miscellaneous Items			
Item	Location	Comment/Justification	
Pathological Waste Incinerator	Medical School	Waste capacity is 145 lb/hr of Type 4 Waste. Below the 200 lb/hr threshold of Env-A 607.01.	
Fuel Storage Tank	Skiway	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	MsKenzie Hall Tractor Fuel	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Skiway, Holts Lift	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Skiway, Caterpillar Shed	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Grounds, Labor Garage	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Hopkins Center	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Medical School	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Colburn Building	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Colburn Building	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Baker Remote, Route 120, Hanover	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Skiway Base Lodge, Lyme, NH	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Grounds Garage	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Chemistry Building, N. College St., Hanover	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Lodge, Route 120, Hanover	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Hillcrest Building, Route 120, Lebanon	Emits less than 1000 lb/year VOC	

List of Insignificant Activities at Dartmouth College - Miscellaneous Items			
Fuel Storage Tank	Minary Conference Center, Route 3, Ashland	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Sachem Village, Route 10, Lebanon	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Sachem Village, 200 Sachem, Lebanon	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Gould Road House, West Lebanon	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	4 Burton Road	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	61 Rivercrest	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	25 W. Wheelock	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	25 ½ W. Wheelock	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	27 W. Wheelock	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	DCCCC, Reservoir Rd., Hanover	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Webster Bldg., 9 Webster Ave.	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Webster Bldg., 13 Webster Ave.	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Webster Bldg., 15 Webster Ave.	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Choate Bldg., 13 Choate	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Burke Bldg.	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	DOC, 10 Hilton Field Lane	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Montgomery House, 12 Rope Ferry	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Grounds/Labor Garage, Dewey Field Parking	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Boat House	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Skiway Caterpillar Shed, Lyme, NH	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Hanover Country Club, 5 Hilton Field Lane	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	HCC - Maintenance, Route 10, Hanover	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Gilman Building	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Berry Library	Emits less than 1000 lb/year VOC	
Fuel Storage Tank	Wilder Building	Emits less than 1000 lb/year VOC	

# **APPENDIX B**

**Attachment 2 - List of All Emergency Generators Located at Dartmouth College** 

List of All Emergency Generators Located at Dartmouth College			
Location	Number of Units	Rated Generator Power Output (kW)	Type of Fuel
Power Plant	1	800	No. 2 Fuel Oil
Berry Library	1	668	Diesel
Wilder Building	1	166	Diesel
Cummings Hall	1	100	LP Gas
Burke Building	1	300	LP Gas
College Hall	1	125	LP Gas
Webster Hall	1	223	No. 2 Fuel Oil
Psychology Building	1	387	No. 2 Fuel Oil
Hanover Inn	1	7.5	Diesel
Byrne	1	15	Diesel
A & B Ward	1	16	Diesel
Sudikoff	1	45	Diesel
Brown	1	15	Diesel
Russell Sage	1	15	LP Gas
Gerry Pent.	1	15	LP Gas
Thompson Arena	1	15	LP Gas
Kiewit East	1	12.5	LP Gas
Wheelock Dorms	1	7.5	LP Gas
Lord	1	15	LP Gas
Mid. Mass	1	15	LP Gas
Berry	1	15	LP Gas
McLain	1	15	LP Gas
Maxwell	1	7.5	LP Gas
Topliff	1	15	LP Gas
Fayer Weather	1	15	LP Gas
Storehouse	1	6	LP Gas

List of All Emergency Generators Located at Dartmouth College			
Storehouse	1	4.5	LP Gas
Storehouse	1	4	LP Gas
Medical Center	1	200	Diesel
Wheelock Hall	1	15	LP Gas
Wheeler Hall	1	15	LP Gas
Gilman Building	1	65	Propane